

North-of-the-Delta Offstream Storage

NODOS Status

Initial Alternatives Information Report

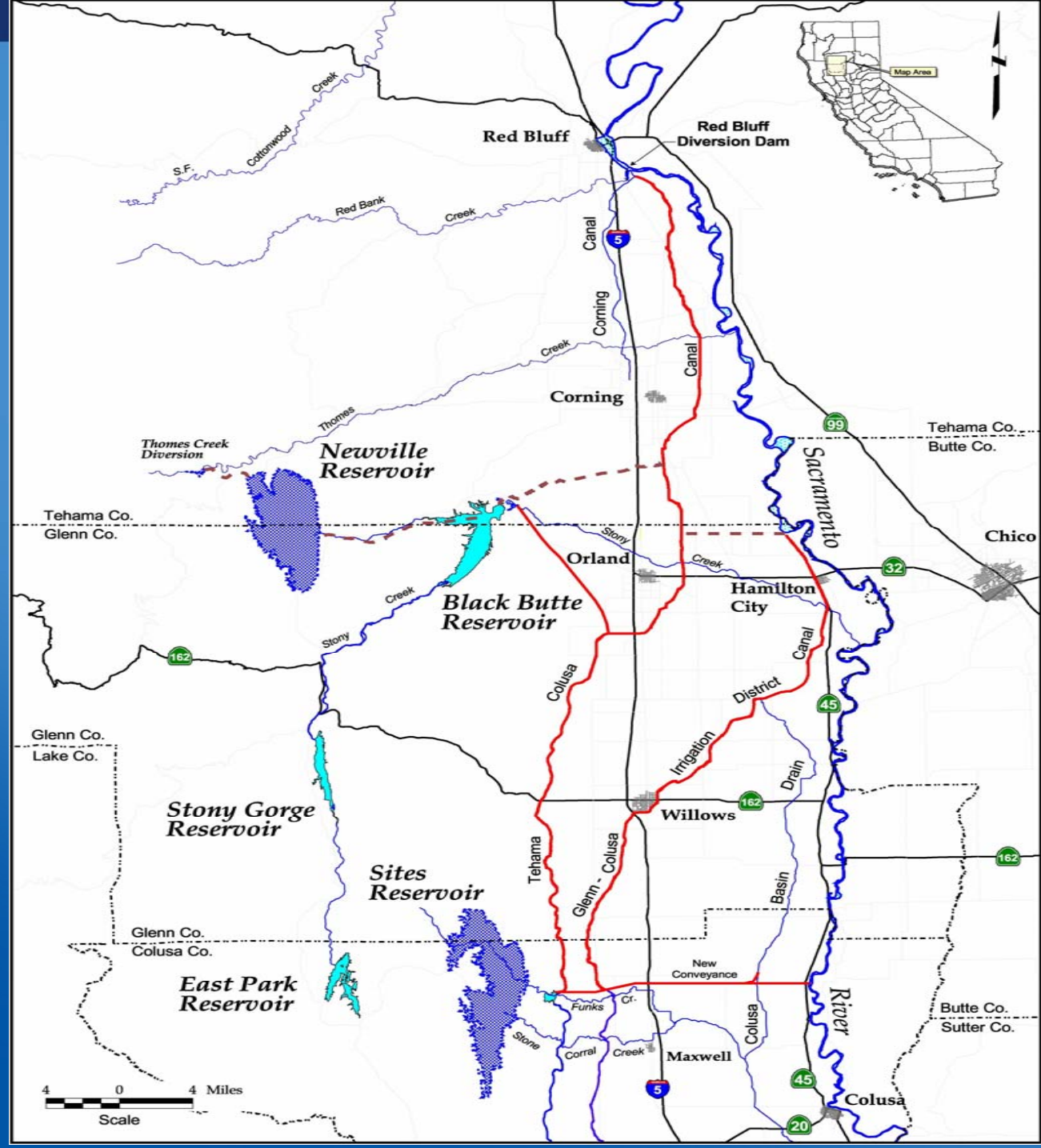
January 31, 2007

Overview

- ▶ History and Background
- ▶ Investigation Status
- ▶ Planning Process
- ▶ IAIR
- ▶ Summary & Questions



Location Map

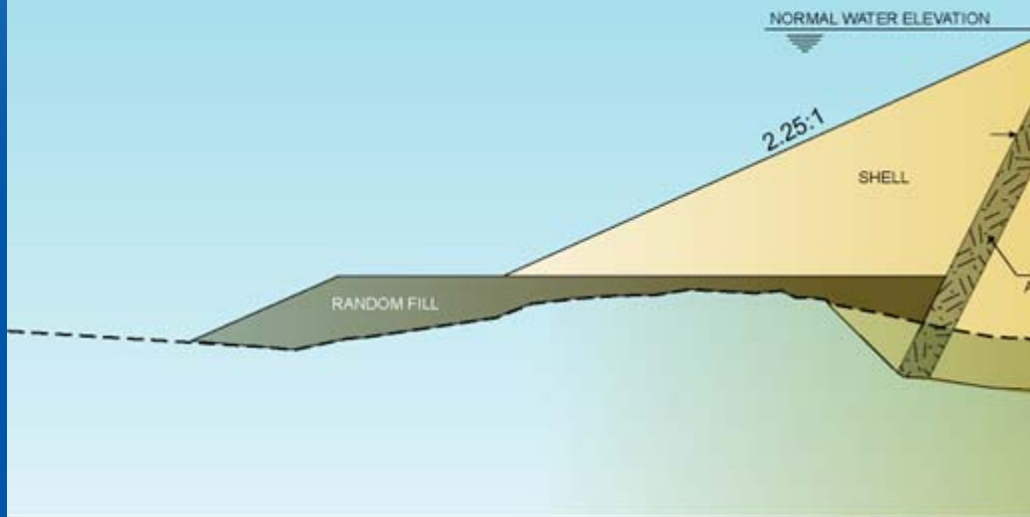


Investigation Status

Engineering Studies ✓

Environmental Surveys ✓

General Assessment of Benefits ✓



Planning Process

- ▶ Initial Alternatives Information Report
- ▶ Plan Formulation Report
- ▶ Feasibility Report
- ▶ EIR/EIS

Problems and Needs

- ▶ Water supply reliability
 - To meet agricultural, urban, and environmental requirements
 - Availability and timing
 - CALFER Preferred Program Alternative identified a need for up to 6 million AF of new storage (3 million NOD)
- ▶ Water management flexibility
 - Operational flexibility

Problems and Needs (cont.)

- ▶ Anadromous fish survival
 - Levees, dams, and diversions have impacted fish survival
 - More options to meet aquatic standards
- ▶ Water Quality
 - More rapid response to meeting water quality standards
 - Rapid response to Delta Levee Breaks
- ▶ Environmental
 - Need to store water to meet ecosystem needs

A New Era of Storage

NODOS Investigation Objectives

Primary:

- Increase water supplies, water supply reliability, and Sacramento Valley water management flexibility for:
 - Agricultural, M&I, and **environmental purposes**, including CALFED programs such as **Delta water quality**, the **Environmental Water Account (EWA)**, and the **Ecosystem Restoration Program (ERP)**.
- **Increase the survival of anadromous fish populations in the Sacramento River** during critical fish migration periods, as well as the health and survivability of other aquatic species

Secondary:

Provide ancillary hydropower, recreation opportunities, and incremental flood control

NODOS Measures Screening

Measures developed and categorized by planning objectives and screened on ability to address planning objectives

Measure Categories:

- ▶ Water Supply Needs and Reliability
- ▶ Anadromous Fish Survival
- ▶ Hydropower Generation

Federal Criteria

- ▶ Completeness
- ▶ Efficiency
- ▶ Effectiveness
- ▶ Acceptability

Initial Alternatives Information Report

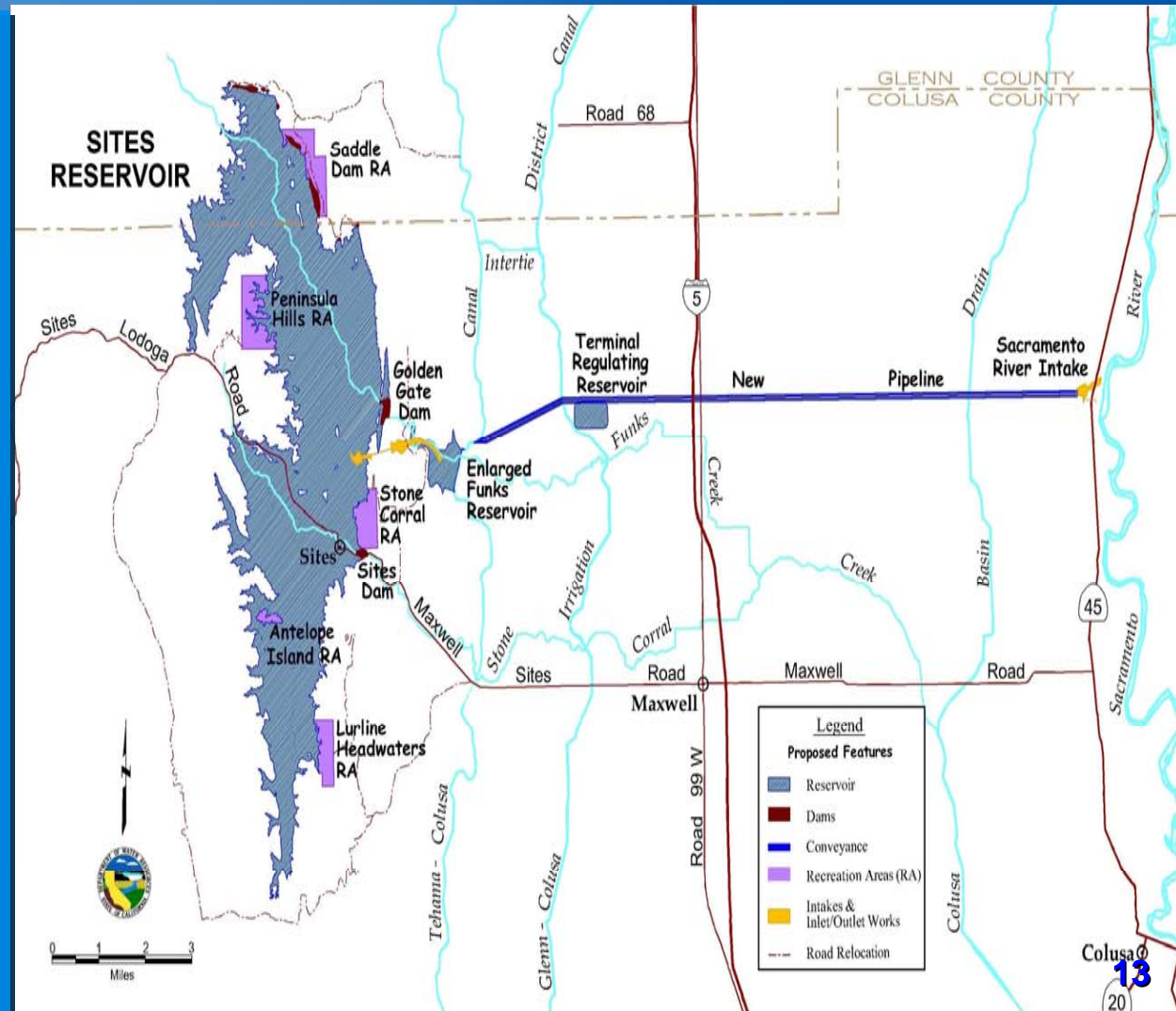
- ▶ Completed Initial Alternatives Information Report in Summer 2006
 - Developed Planning Objectives for NODOS
 - Developed and Screened Measures
 - Sites Reservoir Retained
 - Provided a strategy for formulation of Initial Alternatives with Sites Reservoir

Sites Reservoir

Key Project Features

North-of-the-Delta
Offstream Storage

- ▶ Storage capacity 1.8 MAF
- ▶ 2 Main dams & 9 Saddle dams
- ▶ TC Canal (2,100 cfs)
- ▶ GCID Canal (1,800 cfs)
- ▶ New Pipeline:
 - 2,000 cfs Diversion
 - 1,500 cfs Release
- ▶ Terminal Regulating Reservoir (TRR)
- ▶ Sacramento River Pumping-Generating Plant
- ▶ Golden Gate Pumping Plant
- ▶ Pumping-Generating Plant at TRR



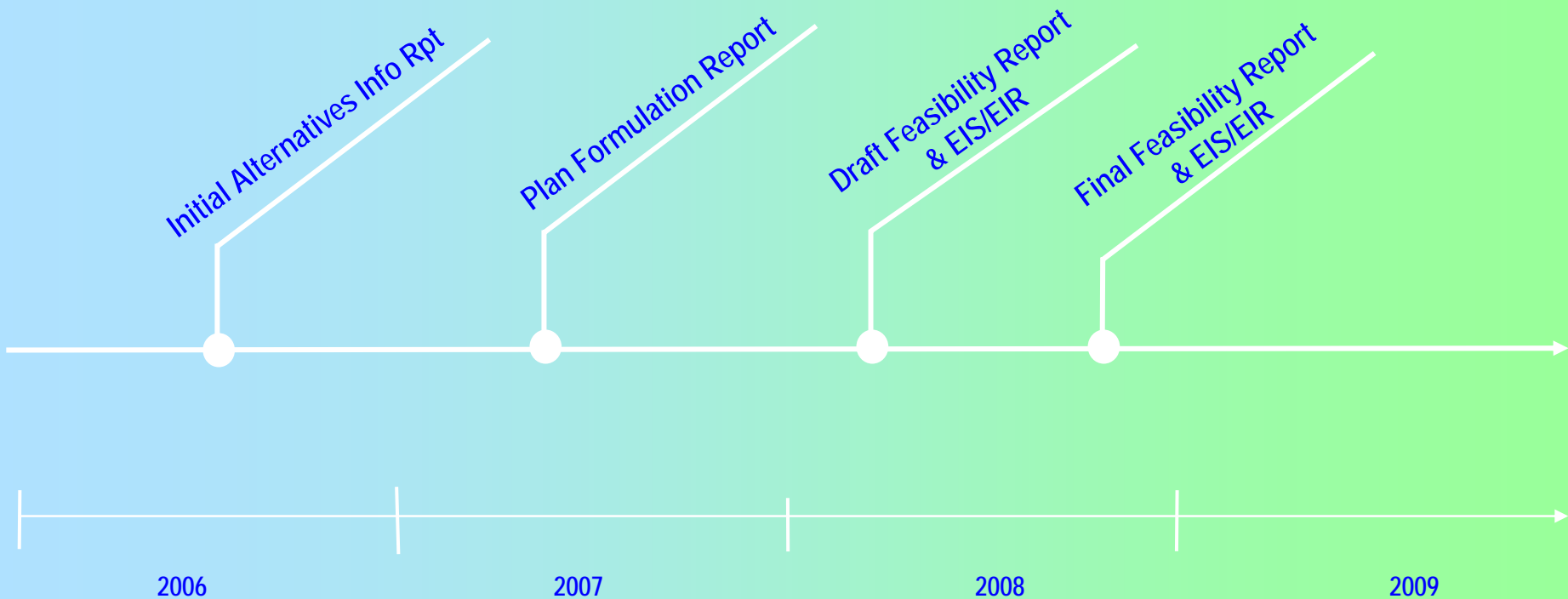
Formulation Strategy for Initial Alternatives

- ▶ Initial Alt. A – Environmental Focus
- ▶ Initial Alt. B – Water Quality Focus
- ▶ Initial Alt. C – Water Supply Focus
- ▶ Initial Alternatives have combination of Retained Measures, Conveyance and Operational Priorities

Conceptual Scenarios for Initial Action Alternatives

Initial Alternative Features	Initial Alternative A Environmental Focus	Initial Alternative B Water Quality Focus	Initial Alternative C Water Supply Focus
Measures			
Construct new conservation offstream surface storage at Sites Reservoir (up to 1.8 MAF)	X	X	
RBDD Mitigation	X	X	
Restore abandoned gravel mines along the Sacramento River	X	X	
Construct instream aquatic habitat downstream of Keswick Dam	X		
Replenish spawning gravel in the Sacramento River	X		X
Develop conservation groundwater storage near the Sacramento River downstream from Shasta Dam	X		X
Conveyance			
TC Canal		X	
GCID Canal		X	
New Pipeline	X	X	
Stony Creek Diversion	X		
Colusa Basin Drain Diversion	X		
Groundwater storage conveyance to/from Sacramento River	X		X
Operational Priorities			
Environmental	1	3	2
Water Supply	3	2	1
Water Quality	2	1	3

Planning Schedule



Summary & Questions

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